(Amended) A silicon/silicon carbide composite according to claim 1, said silicon/silicon carbide composite includes a semiconductor heat treatment member.

8 (Amended) A process for manufacturing a silicon/silicon carbide composite according to claim 6, wherein the length of each cellulose fiber is 1.5 mm or more.

- 9. (Amended) A process for manufacturing a silicon/silicon carbide composite according to claim 6, wherein said cellulose fiber is paper pulp.
- 11. (Amended) A process for manufacturing a silicon/silicon carbide composite according to claim 6, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.
- 12. (Amended) A process for manufacturing a silicon/silicon carbide composite according to claim 6, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.
- 15. (Amended) A process for manufacturing a silicon/silicon carbide composite according to claim 6, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.

Please add claims 18 through 29 as follows:

18. A silicon/silicon carbide composite according to claim 2, wherein said silicon/silicon carbide composite includes a dummy wafer with a silicon carbide film having a thickness of 30 to 150 μm formed on the surface thereof, said dummy wafer having a total thickness of 0.5 to 1 mm.

19. A silicon/silicon carbide composite according to claim 2, said silicon/silicon carbide composite includes a semiconductor heat treatment member.

- 20. A process for manufacturing a silicon/silicon carbide composite according to claim 7, wherein the length of each cellulose fiber is 1.5 mm or more.
- 21. A process for manufacturing a silicon/silicon carbide composite according to claim 7, wherein said cellulose fiber is paper pulp.
- 22. A process for manufacturing a silicon/silicon carbide composite according to claim 7, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.
- 23. A process for manufacturing a silicon/silicon carbide composite according to claim 10, wherein the bulk density of the porous carbon body produced by said first step is 0.70 g/cm³ or less.
- 24. A process for manufacturing a silicon/silicon carbide composite according to claim 7, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.
- 25. A process for manufacturing a silicon/silicon carbide composite according to claim 10, in which a silicification treatment in said second step is conducted by either a reaction with fused silicon or a reaction with silicon monoxide gas.
- 26. A process for manufacturing a silicon/silicon carbide composite according to claim 7, wherein the porous carbon body produced by said first step is heated at a temperature of 1100°C to 2000°C in an atmosphere of halogen gas to be purified prior to the second step.